

**In the Specification:**

Please replace paragraph [0023] with the following amended paragraph:

[0023] Internet Search Engines. Internet search engines capture, store and index web site information in order to retrieve web site listings in response to [[a]] user query. These software programs have a limited ability to determine the quality or relevance of the web sites they retrieve. Further, as the nature of the available content has become more difficult to classify, many companies offering search engines are being forced to employ significant editorial staffs to ensure that responses to queries are satisfactory. Search engines based on natural language have the added difficulty of accurately determining sentence syntax and nuances.

Please replace paragraph [0029] with the following amended paragraph:

[0029] None of the devices or methods available in the prior art, however, provides a way of integrating all available technologies together in order to provide [[an]] a user friendly virtual environment which provides the user with an easy to use technological solution while at the same time taking advantage several available technologies. Thus, there is a need for a virtual environment and method of creating said environment which overcomes these and other deficiencies in the prior art.

Please replace paragraph [0031] with the following amended paragraph:

[0031] This invention will ~~dynamically~~ create a dynamic virtual reality environment based on [[an]] user's individualized personality, interests or needs using an artificial intelligence engine's experience with the individual user of the invention.

Please replace paragraph [0034] with the following amended paragraph:

[0034] The virtual environment is to engage users from all walks of life by using their chosen natural, non-technical language at personal and individual level. To accomplish ~~this~~ this, the environment will use advanced Artificial Intelligence driven semantic processing, voice recognition, and digital and audio technology to create a unique environment that provides

verbal, natural language, intuitive and friendly navigational aides and online/offline human quality support.

Please replace paragraph [0037] with the following amended paragraph:

[0037] A primary feature of the virtual environment of this invention is that it should, to the ~~extent~~ possible extent, make the technology disappear. Currently, users must directly deal with three artifacts of technology--operating systems, user interfaces and browsers--before they even get to deal with applications that could possibly affect their lives. Today's operating system/user interface/browser combinations are not truly intuitive nor user friendly. This invention provides a new non-technical and natural integrated user interface/browser based on a totally transparent and stable real time operating system. This innovative "front end" is housed in a set-top box, which provides interaction and access using the user's television and telephone. In other embodiments of this invention this front end may be modularly constructed to reside in any other user devices that provide appropriate access to the virtual environment.

Please replace paragraph [0039] with the following amended paragraph:

[0039] The environment of this invention provides intelligent, efficient and non-patronizing means to deliver marketing, promotion, and merchandising services as a natural and unobtrusive part of the users online experience. There is a tendency for the online world to become over infatuated with mercantile e-commerce as the primary driving force in the online experience. In life as we know it, shopping and entertainment are not the only thing that we do. We need to work productively to be able to shop and be entertained as well as fulfill our sense of accomplishment. We seek communications and relationships with the community at large in order to share a common experience and social bonding. People over time will not become loyal, persistent users of a medium that just tries to sell them something all the time. The environment of this invention brings ~~teases~~ out of the user experience strong models of local community development that can be used to help people actually lead what they perceive as better and more fulfilling lives. Among those models are ones to facilitate high quality, user oriented healthcare, expand the quality and availability of education at all levels, help local people make a living

thereby expanding local community options, support community activism and participation and increasing the general level of understanding between individuals and communities. By facilitating these types of activities, the environment of this invention will support electronic commerce as a necessary by product.

Please replace paragraph [0056] with the following amended paragraph:

[0056] Organized and catalogued by an Artificial Intelligence technology in order to present the proper least possible number of relevant choices to each user.

Please delete paragraphs [0067]-[0070].

Please replace paragraph [0071] with the following amended paragraph:

[0071] FIG. 1, is a block diagram of an embodiment of the set-top box, VCR, and cable decryption box interface, case 1.

Please replace paragraph [0072] with the following amended paragraph:

[0072] FIG. 2, is a block diagram of an embodiment of the set-top box, VCR, and cable decryption box interface case 2.

Please replace paragraph [0073] with the following amended paragraph:

[0073] FIG. 3, is a block diagram of an embodiment of the set-top box, VCR, and cable decryption box interface case 3.

Please replace paragraph [0074] with the following amended paragraph:

[0074] FIG. 4, is a block diagram of an embodiment of the set-top box, VCR, and cable decryption box interface case 4a.

Please replace paragraph [0075] with the following amended paragraph:

[0075] FIG. 5, is a block diagram of an embodiment of the set-top box, VCR, and cable decryption box interface case 4b.

Please replace paragraph [0076] with the following amended paragraph:

[0076] FIG. 6, is a block diagram of an embodiment of the set-top box, VCR, and cable decryption box interface case 4c.

Please add the following new paragraph after paragraph [0076]:

[0076.1] FIG. 7A, is a top level block diagram for an Artificial Intelligence System.

Please replace paragraph [0077] with the following amended paragraph:

[0077] FIG. [[7]] 7B, is a mid level block diagram for an Artificial Intelligence System.

Please replace paragraph [0092] with the following amended paragraph:

[0092] The virtual environment of this invention encompasses three separate elements: a set-top box FIG. 11 and a voice equipped remote controller, FIG. 11, 1101, which provide a very friendly user interface to the system, [[a]] TV and or PC, and a group of computer servers as the back-end to support all services available from the set-top box. These services may include, among others, home banking, e-commerce, e-services, education, entertainment, voice over IP, and video over IP. In addition, hardware and software infrastructure is required for supporting the above components, e.g. connectivity means (telephone lines, cables, DSL, satellite, etc.) and Application Service Provider (ASP).

Please replace paragraph [0099] with the following amended paragraph:

[0099] Making reference to FIG. 7 FIGs. 7A, and 7B, the present invention provides an artificial intelligence engine 701 to guide and assist the user of the virtual environment. In its preferred embodiment, the invention's intelligent assistant is represented by an animated character or avatar having human-like features and gestures. The character can communicate back to the user through text, voice, and its own animated gestures 702. The invention's intelligent assistant automatically and constantly collects information of interest to the user in order to create a user profile 703.

Please replace paragraph [0103] with the following amended paragraph:

[0103] The assistant 702 is an imaginary virtual character or avatar whose duties are the following:

Please replace paragraph [0110] with the following amended paragraph:

[0110] In the preferred embodiment, the intelligent assistant is portrayed as an animated character with human-like features. Other embodiments may use any animated characters through the use of any graphic image. The intelligent assistant incorporates the core technology of artificial intelligence. In the preferred embodiment, the intelligent assistant exhibits human-like intelligence and behavior including cognitive reasoning, voice recognition, ability to learn or adapt through experience, pattern recognition, and natural language understanding.

Please replace paragraph [0171] with the following amended paragraph:

[0171] B. E-commerce (encrypted credit card payments). The credit card details are encrypted when [[an]] a user of the environment submits the information into the set-top e-commerce application. The details are then sent from the subscriber to the particular merchant as an encrypted message.

Please replace paragraph [0174] with the following amended paragraph:

[0174] E-commerce applications: Provide a catalog containing text and multimedia information on every merchant. [[An]] A user navigates the catalog of items and decides to order a particular item.

Please replace paragraph [0225] with the following amended paragraph:

[0225] G. User Assistance and Learning. The User Assistance and Learning module has two major roles. The first one is training [[an]] the user to use the system and providing online help documents. The system will introduce the environment to [[an]] the user in a natural and user friendly way so that no prerequisite knowledge is needed in learning the system. The other one is to play the role of an assistant when [[an]] the user has any problem in using the system. The assistance includes solving problems and providing suggestions. This system needs to talk with the Subscriber Management System and provide possible preference information.

Please replace paragraph [0307] with the following amended paragraph:

[0307] The environment of the invention may ~~provide~~ provides [[an]] the user with information like news, weather, sports, stock quotes, and so on. The service can be customized according to individual tastes. The medium of the service can be an audio broadcast or be displayed on TV. The information will be provided during the set-top box initialization so that customers will not notice possible delay of system initialization. Another feature of the environment of the invention is to provide alert or notice to users, reminding them that a new e-mail just arrived, or a television program will be broadcasted in about 10 minutes, or a chatter asks for a conversation and waiting for his or her reply, and so on.

Please replace paragraph [0337] with the following amended paragraph:

[0337] The hardware of the STB differs from that of a regular computer. It has no floppy drive, no noisy cooling fan, will connect to a TV, at least with NTSC/PAL and HDTV, VGA and S-Video, will remain options. A tuner, a remote control and a keyboard are essential in the design of the preferred embodiment of the environment of the invention. ~~The software includes Speech Processing,~~

Please replace paragraph [0338] with the following amended paragraph:

[0338]        The software includes Speech Processing, Virtual Reality (VR) and Artificial Intelligence technologies, voice mail and video mail are also part of the preferred embodiment.

Please replace paragraph [0339] with the following amended paragraph:

[0339]        The design and operation of the STB are geared towards technically inexperienced users, ~~who don't and won't have a "computer,"~~ and who don't have the patience or inclination to deal with software upgrades, cryptic error messages, installation configuration or complicated instruction manuals.